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(54) POSITION DETECTING DEVICE AND LENS POSITION CONTROLLER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a construction which is simple and inexpensive and can be miniaturized, and can highly accurately detect a position, and moreover can carry out an initializing motion in a short time, in a position detecting device where a magnetic scale magnetized in mutually reverse polarity at fixed intervals is relatively moved to a magnetic sensor to magnetically detect the position of the magnetic scale.

SOLUTION: The magnetized pattern of a magnetic scale 103 is composed of a moving signal part 111 which is magnetized in mutually reverse polarity at fixed intervals P along the longitudinal direction of the above scale, and generates a periodical signal with the movement of a scale, and a reference signal part 112 for generating a signal to show the reference of the position of the magnetic scale. The reference signal part 112 is composed as a magnetized part whose magnetized width is two times as much as a magnetizing space P so as to disturb the periodicity of change in the strength distribution of a magnetic field due to the magnetization of the moving signal part 111, and plurally provided, and is composed so as to be severally different in their spaces.

